**Standard Operating Procedures:**
**Contractor Construction Waste Management (CWM)**
**Clean Fill Material**

Date: 9/15/2020 Version: 1 Review Frequency: Annual

**Reasons for Procedure**

This procedure for the management of clean fill material has been developed to ensure all clean fill materials are managed in accordance with all applicable Federal, State, and local waste management regulations and to ensure correct characterization and management of clean fill material. The procedure is also intended to protect the University and its surrounding environment from potential impacts from project-related waste management activities, including transportation and disposal activity.

## 1.0 Purpose

**1.1** To educate construction contractors, subcontractors, and staff in the characterization and appropriate handling of clean fill materials.

**1.2** To ensure that if suspected contaminated material is encountered, proper notifications and sampling procedures are followed.

**1.3** To provide clean fill management guidelines for projects that are not required to develop a Waste Management Plan (WMP). WMPs are required for all projects over $3 million construction budget or smaller projects anticipated to generate significant amounts of demolition debris.

## 2.0 Scope

These procedures apply to the characterization, handling, transportation and disposal of clean fill materials by construction and demolition contractors, subcontractors and their employees working on UVA's behalf that is not already covered by a WMP. Materials other than soil – listed in the table below - may be classified as clean fill material provided no open dump, hazard, or public nuisance is created.

| Clean Fill* | NOT Clean Fill |
|---|---|
| Concrete, masonry and paving materials (e.g., brick, block, broken concrete, asphalt, etc.) | Contaminated soil, rock, concrete, etc. (e.g., petroleum, oil, rebar, solvents, sludges, steel, etc.) |
| Hardened wastes including concrete washout, masonry mud, cement, etc. | Wood (including; lumber, framing, plywood, pallets, stakes, root balls, other woody vegetation) |
| Crushed glass or porcelain | Plastic (e.g., piping, shrink wrap, banding, bags, etc.) |
| Rock, cobble, stone, gravel | Insulation (e.g., fiberglass mesh and paper backing) |
| Uncontaminated dirt, overburden | Metal (e.g., structural steel, rebar, piping, etc.) |
| | Wire (e.g., electrical, tie wire, structural mesh), including blasting caps and fuse wire. |
| | Broken/damaged piping (e.g., PVC/plastic, metal, corrugated, etc.) |
| | General trash – (e.g. food containers, paper, bottles and cans, etc.) |

**In the event of clean fill being hauled to a local fill site, local ordinances must be reviewed prior to hauling to determine if local definitions of clean fill are more restrictive than those listed here*

## 3.0 Responsibility

### 3.1 Managers and Supervisors

The contractor (and subcontractor) managers and supervisors are responsible for ensuring all of their staff involved with managing, transporting, or disposal of clean fill are trained on the procedures outlined in the most recent version of this SOP. In particular, managers and supervisors are responsible for executing proper load manifesting and manifest document retention.

### 3.2 Personnel Performing Construction/Demolition Activities

All contractors, subcontractors, and their employees who are engaged in clean fill handling must follow the procedures outlined in this SOP. If personnel are unsure of the proper procedures, they should contact their supervisor. Personnel will notify management if they encounter fill material that they believe may be contaminated.

## 4.0 Procedures

### 4.1 Stockpiling Clean Fill Material on the Project Site for Temporary Storage

4.1.1 Where feasible, locate stockpiles away from the project boundary and sensitive receptors. Sensitive receptors may include air intakes, stormwater drop inlets, curb inlets, wetland areas, sensitive vegetation, and ponds, streams and other waterways.

4.1.2 Soil stockpiles shall be fully encircled with silt fence or covered with plastic sheeting or other similar material at any time the stockpile is not in active use. When in use, every effort shall be made for heavy equipment to enter the pile on the up-slope side, leaving the down-slope side encircled with silt fence.

4.1.3 Refer to the Erosion & Sediment Control Plan for additional stockpiling requirements such as perimeter controls, stabilization, inspections, etc.

4.1.4 Stockpiles should be located so that management of the pile is not impeded and that loading and hauling equipment have a safe path of ingress and egress.

### 4.2 On-Site Processing of Non-Soil Clean Fill Material

4.2.1 To the extent space allows, non-soil material intended for use as clean fill should be processed on site to remove potential sources of contamination. This may include on site crushing, mechanical screening, utilizing magnets to remove metals, or hand-picking contaminants.

4.2.2 If using a mobile crusher unit, the operator must confirm if an air permit is applicable, based on the quantity of material to be processed and throughput rate(s) of the crusher. Crushers are a contributing source of particulate emissions. As a best practice, crushers typically employ some form of wet suppression for dust control.

4.2.3 In the event there is not adequate space to allow on site processing of non-soil material intended for use as clean fill, the contractor should follow sorting recommendations from the intended receiving site to segregate all unacceptable materials from each load to ensure the materials will be accepted.

4.2.4 Any materials (e.g., metals, plastic, wire, etc.) that cannot be segregated from the surrounding concrete or block should be managed as a solid waste and disposed.

### 4.3 Inspections of Clean Fill Material

4.3.1 Routine inspections of waste storage areas should occur by contractor (or subcontractor) staff on a daily basis before the close of each work day. Allow sufficient time for implementation of corrective measures as necessary.

4.3.2 Inspectors should report any evidence that clean fill material may be contaminated or contain unsuitable solid wastes.

4.3.3 Inspect access, ingress/egress for any impedances.

4.3.4 Look for signs that stockpile erosion and sediment controls are not functioning in a way that keeps the fill material in place and prevents erosion.

4.3.5 Whether during a formal inspection or not, correct waste management deficiencies when observed. If assistance is needed, report the deficiencies to the site supervisor.

4.3.6 A manager, supervisor, or other designated responsible person must periodically observe and monitor truck loading activities to assure that unacceptable materials are not comingled with clean fill and/or potentially contaminated materials being loaded. In the event any unacceptable or contaminated materials are observed being loaded, the entire load will be re-deposited onsite until the material is acceptable for offsite disposal. Any unacceptable loading must be reported to the UVA Project Manager/Construction Administration Manager (PM/CAM).

**4.4 Evaluation of Potential Petroleum Contamination of Excavated Soils**

4.4.1 The contractor shall immediately halt soil excavation and transport activities and notify the UVA PM/CAM if visual examination, odors or other evidence suggests that soils may be contaminated with oil or hazardous materials. The PM/CAM shall report this information to UVA Environmental Resources.

4.4.2 The contractor will assist UVA Environmental Resources in conducting the required testing on any fill material suspected of being contaminated. Soils suspected of petroleum contamination should be covered with plastic or other material to prevent potential contact with stormwater.

4.4.3 The contractor will follow UVA Environmental Resources requirements for material handling should the test results conclude the fill material is contaminated.

**4.5 Clean Fill Hauling to Off-Site Facility**

4.5.1 The University shall have the first option to reuse the fill material at other University project sites prior to the material being considered for off-site use or disposal.

4.5.2 At least one week prior to initiating hauling activity, the site supervisor will provide UVA Environmental Resources and the PM/CAM with the location of any off-site facility that will be sent clean fill and a copy of the permit granting permission for the activity at the off-site facility. UVA Environmental Resources will verify the location has an up-to-date land disturbance or disposal permit and approval by the receiving locality and/or DEQ. Documentation of authorized off-site fill and borrow locations shall be included with the project stormwater pollution prevention plan (SWPPP), if applicable.

4.5.3 The site supervisor will provide UVA Environmental Resources and the PM/CAM with information regarding significant planned hauling activities of clean fill materials to any privately owned lands. UVA Environmental Resources will notify local authorities of all significant clean fill hauling and disposal activities and confirm any restrictions, sensitive transportation routes, detours, etc.

4.5.4 The site supervisor will review appropriate hauling times and route(s) between the project site and designated receiving location with the hauling contractor. Communicate to the hauling company the location of any sensitive areas that must be avoided. Whenever feasible, efforts should be taken by the hauling

company to use a loop route rather than exiting via the same route of entry to lessen traffic experienced by the surrounding community. Discuss truck traffic and expected "good neighbor" practices prior to the start of hauling.

4.5.5 Hauling will comply with established haul routes, respective traffic laws, and will commence only during the disposal facility's hours of operation. Additional transportation and disposal restrictions may be imposed by the local jurisdiction authorities.

4.5.6 In the event hauling activities generate complaint(s) from surrounding parties, UVA will work with the contractor to implement other traffic control measures to include but not limited to: approving haul route(s), limiting the number of hauling trucks, and/or limiting hours of operation(s).

4.5.7 All waste transportation drivers must be properly licensed (i.e., Commercial Driver's License).

### 4.6 Clean Fill Disposal Manifesting/Documentation

4.6.1 A properly executed manifest or bill-of-lading should accompany each load of clean fill transported from the project site.

4.6.2 Each manifest should include the date, appropriate name of the receiving facility or location and the material description.

4.6.3 Retain copies of completed manifest/bill-of-lading for the life of the project and provide copies to the University upon request.

## 5.0 Review of Procedure/Training

Managers are responsible for reviewing this procedure with all applicable staff immediately upon start of work on site and refresher training shall be provided as often as needed to ensure compliance. This SOP is supplemented by a concise Quick Guide for use at contractor tailgate meetings and for posting at designated project information locations. Visit the UVA Environmental Resources website for copies of relevant training materials.

## 6.0 Regulatory Impacts

6.1 Clean fill materials approved for off-site reuse shall be placed in accordance with zoning and land disturbance requirements specified by the receiving locality. The receiving property/location shall have a current land disturbance permit issued by the receiving locality.

6.2 Uncontaminated clean fill materials which cannot be re-used and must be disposed off-site shall be regulated by the DEQ Solid Waste Management regulations, 9 VAC 20-81 et seq.

*Printed versions of SOPs with previous review dates are considered current as long as the version number is the same as the current version. Current versions of all SOPs are maintained on the UVA Environmental Resources website.